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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA,
SAN FRANCISCO DIVISION

20 SONOS, INC.,
21 Plaintiff and Counter-defendant,
22 v.
23 GOOGLE LLC,
24 Defendant and Counter-claimant

Case No. 3:20-cv-06754-WHA
Consolidated with
Case No. 3:21-cv-07559-WHA

**SONOS, INC.'S OPPOSITION TO
GOOGLE'S BRIEF ON AFFIRMATIVE
DEFENSES**

Judge: Hon. William Alsup
Courtroom: 12, 19th Floor
Trial Date: May 8, 2023

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1 **I. INTRODUCTION**

2 Google asks the Court to overturn the jury’s finding that the ’885 patent is valid and
 3 infringed on the basis of prosecution laches and equitable estoppel. And Google seeks to apply
 4 the same affirmative defenses to the ’966 patent. But Google has failed to prove either defense,
 5 and both fail as a matter of law.

6 Google’s claim for prosecution laches rests on caselaw finding unreasonable delay where
 7 a patentee delayed prosecution in order to improperly *extend* a patent’s term, creating a so-called
 8 “submarine patent.” But Google fails to inform the Court that, because of a 1995 statutory
 9 change, any alleged delay in claiming overlapping groups in the ’885 and ’966 patents hurt only
 10 Sonos, effectively reducing Sonos’s patent terms to seven or eight years instead of the full 20
 11 years. Google identifies *no* authority finding prosecution laches for a post-1995 patent like the
 12 ’885 and ’966 patents, and also identifies no unreasonable delay or prejudice more generally.

13 Google’s claim for equitable estoppel should also be rejected. Google says Sonos
 14 remained silent about its patent rights. This is flatly contradicted by the record. Sonos promptly
 15 sued Google on the ’966 patent, and sued Google on the ’885 patent mere weeks after it issued.
 16 And for several years before this suit, Sonos repeatedly asked Google to enter into a license to use
 17 Sonos’s IP, including Sonos’s zone scene technology in particular.

18 Meanwhile, Google’s sole authority in support of equitable estoppel involved a finding of
 19 *implied license*—and an undisturbed trial finding that equitable estoppel was not appropriate.
 20 More generally, Google has no basis for arguing that Sonos’s actions suggested it would not
 21 enforce its patent rights. Sonos had previously raised Google’s infringement of zone scenes
 22 patents, and there is no evidence that Sonos ever suggested to Google that Sonos was abandoning
 23 its infringement claims. Google’s entire foundation for its argument is facts related to its “Cast
 24 for Audio” program—which Google previously told the Court was solely related to “direct
 25 control” technology and irrelevant to zone scenes.

26 The Court should deny Google’s request for judgment in its favor with respect to its
 27 affirmative defenses.

28

1 **II. LEGAL STANDARD**

2 Google bears the burden of proving both elements of prosecution laches by clear and
 3 convincing evidence, as explained below. *Infra* 3-4. Google bears the burden of proving each
 4 element of equitable estoppel by a preponderance of the evidence. *Gasser Chair Co. v. Infantil*
 5 *Chair Mfg. Corp.*, 60 F.3d 770, 776 (Fed. Cir. 1995). The Court must deny Google’s defenses
 6 unless Google meets those burdens.

7 **III. ARGUMENT**

8 **A. Prosecution Laches Does Not Apply Here.**

9 Prosecution laches is a rarely applied doctrine for use “only in egregious cases of misuse
 10 of the statutory patent system.” *Symbol Techs., Inc. v. Lemelson Med., Educ. & Research Found.*,
 11 422 F.3d 1378, 1385 (Fed. Cir. 2005). Indeed, it is so rare that the Federal Circuit has applied it
 12 just *four* times to find a patent unenforceable, and only to patents originally filed before June 8,
 13 1995. That date marked the change in U.S. patent law from measuring a patent’s term “as 17
 14 years from the date of issuance” to measuring it as “20 years following the filing date of the
 15 application or an earlier non-provisional application to which the subject application claims
 16 priority.” *Hyatt v. Hirshfeld*, 998 F.3d 1347, 1352 (Fed. Cir. 2021). The former regime
 17 “incentivized certain patentees to delay prosecuting their patents by abandoning applications and
 18 filing continuing applications in their place,” which could go on “indefinitely.” *Id.* at 1351.
 19 These strategic delays created so-called “submarine patents” that could lie hidden for decades
 20 only to issue—still with a 17-year-term—when competitors had unwittingly released products
 21 using the now-established technology. *Id.* at 1352.

22 Congress solved that problem by keying a patent’s term to the application’s filing date
 23 instead of the date of issuance. *Id.* Simply put, creating a new submarine patent became
 24 impossible after 1995—crucial context that Google neglects to mention. Here, Sonos filed the
 25 first non-provisional application in 2007, so the ’885 and ’966 patents will expire in 2027—no
 26 matter that they issued in 2020 and 2019, respectively. So Sonos’s filing of the patent
 27 applications in 2019 did not “extend” the term of Sonos’s patent protection. And contrary to
 28 Google’s claim that Sonos “concealed” its invention, the Patent Office made public in 2013

1 (i) the 2007 non-provisional specification and (ii) the 2006 provisional application, which
 2 included the appendices thereto, both of which disclosed and provided support for overlapping
 3 zone scenes. 2013 was two years before Google entered the smart-speaker market. It was also
 4 before the parties' talks about integrating Google's music-streaming service with Sonos's
 5 technology.

6 On the other side of the spectrum, each of the four cases where the Federal Circuit applied
 7 prosecution laches involved a patentee who put tremendous effort into abusing the system with
 8 submarine patents. In *Hyatt*, for example, the patentee filed so many enormous applications
 9 (literally *hundreds*) that the PTO had to create a special unit dedicated to examining them and
 10 "estimated it would take 532 years of examiner time at its then-current rate to process Hyatt's
 11 applications." 998 F.3d at 1354-55. Sonos's reasonable conduct in prosecuting its patents does
 12 not even enter the same universe as *Hyatt*. Google's request for prosecution laches is wrong on
 13 the burden of proof, wrong on the law, and wrong on the facts, and the Court should deny it.

14 **1. The proper burden of proof is clear and convincing evidence.**

15 Prosecution laches requires an infringer to prove two elements: (1) "that the patentee's
 16 delay in prosecution was unreasonable and inexcusable under the totality of the circumstances,"
 17 and (2) "that the accused infringer suffered prejudice attributable to the delay." *Hyatt*, 998 F.3d
 18 at 1362. The Court should apply a clear-and-convincing-evidence burden to prosecution laches.
 19 Although the Federal Circuit has not expressly clarified an infringer's burden of proof for
 20 prosecution laches, other unenforceability defenses require proof by clear and convincing
 21 evidence. *See Cancer Research Tech. Ltd. v. Barr Labs., Inc.*, 625 F.3d 724, 732 (Fed. Cir. 2010)
 22 (applying the clear-and-convincing standard for the defense of inequitable conduct); *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1287 (Fed. Cir. 2011) (en banc) (same). And the
 23 clear-and-convincing standard "is consistent with the presumption of validity," *Personalized Media Commc'nns, LLC v. Apple, Inc.*, 552 F. Supp. 3d 664, 684 (E.D. Tex. 2021) (applying clear-
 24 and-convincing standard to prosecution laches), because 35 U.S.C. "§ 282 requires an invalidity
 25 defense to be proved by clear and convincing evidence," *Microsoft Corp. v. i4i Ltd. P'shp*, 564
 26 U.S. 91, 95 (2011). Thus, the Federal Circuit affirmed the district court's decision in *PMC*
 27
 28

1 applying the clear-and-convincing standard to a prosecution-laches defense. *Personalized Media*
 2 *Comm’ns, LLC v. Apple, Inc.*, 57 F.4th 1346, 1358 (Fed. Cir. 2023) (“PMC”).

3 Google contends that it bears the burden to prove prosecution laches by a preponderance
 4 of the evidence, but it has no binding support for that argument. Dkt. 819 (“Google Br.”) at 2
 5 (citing *Reiffin v. Microsoft Corp.*, 270 F. Supp. 2d 1132, 1156 (N.D. Cal. 2003)). Nor does
 6 Google attempt to explain why the preponderance standard would apply to a defense that
 7 “render[s] a patent unenforceable,” *Cancer Research*, 625 F.3d at 728, when § 282 supplies a
 8 statutory presumption of validity. *Reiffin*’s decision on prosecution laches, on which Google
 9 principally relies, did not reach the Federal Circuit. Nor did the other cases that Google cites for
 10 the preponderance standard, which long predate *PMC*. See Google Br. at 2; *Regents of Univ. of*
 11 *Cal. v. Monsanto Co.*, No. C 04-0634 PJH, 2005 WL 3454107, at *24 (N.D. Cal. Dec. 16, 2005)
 12 (following *Reiffin*); *Intuitive Surgical, Inc. v. Computer Motion, Inc.*, No. Civ.A. 01-203-SLR,
 13 2002 WL 31833867, at *5 n.4 (D. Del. Dec. 10, 2002) (stating in dicta that the preponderance
 14 standard applied but noting that another district court applied the clear-and-convincing standard).

15 Consistent with § 282, the Supreme Court’s holding in *i4i*, and the Federal Circuit’s
 16 application of the clear-and-convincing standard to other doctrines of unenforceability, this Court
 17 should hold Google to the clear-and-convincing standard. Google makes no attempt to meet that
 18 burden, and its motion can be denied on that basis alone. In any event, as explained below,
 19 Google cannot meet the preponderance standard.

20 **2. Sonos did not unreasonably delay prosecution.**

21 Google turns to *Reiffin* on the first element of prosecution laches, arguing that seven
 22 factors from that decision determine whether any delay in prosecution was unreasonable. Google
 23 Br. at 4. The Federal Circuit has never applied the *Reiffin* factors. Instead, the Federal Circuit’s
 24 caselaw requires a holistic review of the “totality of the circumstances,” *PMC*, 57 F.4th at 1354,
 25 “including the prosecution history of all of a series of related patents” and any “overall delay in
 26 issuing claims,” *Hyatt*, 998 F.3d at 1364 (quoting *Symbol Techs.*, 422 F.3d at 1386). Thus, Sonos
 27 addresses the totality of the circumstances here instead of walking through the *Reiffin* factors.

1 a. Prosecution laches does not apply to post-1995 applications.

2 To start, Sonos filed all of its applications many years *after* the 1995 change in calculating
 3 patent terms described above. Google has not identified a single case applying prosecution laches
 4 to a patent like Sonos's where the original application was filed after 1995. *Cf. Reiffin*, 270 F.
 5 Supp. 2d at 1148, 1149 (initial application was filed in 1982); *Monsanto*, 2005 WL 3454107, at
 6 *1 (initial application was filed in 1980); *Intuitive Surgical*, 2002 WL 31833867, at *4 (initial
 7 application was filed in 1992). And the Federal Circuit's prosecution-laches cases all addressed
 8 patents that resulted from applications filed before the law on patent terms changed in 1995. In
 9 *PMC*, for example, the patentee "filed 328 GATT-Bubble applications" that claimed priority to a
 10 1987 application, and then delayed prosecution so the relevant patent did not issue until 2011.¹
 11 57 F.4th at 1350-53. Similarly, in *Hyatt*, the patentee filed 381 GATT-Bubble applications that
 12 claimed priority to as many as "43 applications filed from 1969 to 1983," and then managed to
 13 delay prosecution through at least 2013. 998 F.3d at 1353-54; *see also Symbol Techs.*, 422 F.3d
 14 at 1380, 1386 (initial applications filed in the 1950s; issuance delayed up to 39 years); *In re*
 15 *Bogese*, 303 F.3d 1362, 1363-65 (Fed. Cir. 2002) (patentee filed initial application in 1978 and
 16 then embarked on a pattern through the mid-1990s of filing continuation applications without
 17 amending any claims and abandoning the preceding application).

18 The lack of support for post-GATT prosecution laches is no accident. Prosecution laches
 19 developed to thwart the "practice" of "deliberately and without excuse postpon[ing] beyond the
 20 date of the actual invention, the beginning of *the term of* [the patentee's] monopoly." *Hyatt*, 998
 21 F.3d at 1360 (quoting *Woodbridge v. United States*, 263 U.S. 50, 56 (1923)) (emphasis added).
 22 But that practice is now a relic of the pre-1995 patent system. The '885 and '966 patents are not,
 23 and could not be, submarine patents; they claim priority to a 2006 provisional and 2007
 24 nonprovisional application, so their terms will expire in 2027. In other words, Sonos did not (and
 25 could not) "postpone" its patent monopoly by delaying filing of its patent applications. Just the

26 ¹ "GATT" refers to the Uruguay Round of the General Agreement on Tariff and Trade, an
 27 international meeting where the United States committed to changing how its law defined patent
 28 terms. *Hyatt*, 998 F.3d at 1352. The "GATT Bubble" was "a patent application gold rush in the
 spring of 1995" where many applicants hurried to file their applications before the new law on
 20-year terms from the date of filing took effect. *Id.*

1 opposite—any delay in Sonos’s filing of the continuation applications that became the ’885 and
 2 ’966 patents meant that Sonos had a shorter patent term, not that Google and the public were
 3 subject to a patent which should have expired much earlier. The Court should reject Google’s
 4 prosecution laches defense on that ground alone.

5 **b. The circumstances here do not show any unreasonable delay.**

6 Even if prosecution laches applied to post-GATT patents, the evidence does not come
 7 anywhere close to the facts in the Federal Circuit’s cases applying prosecution laches.

8 First, although the “prosecution history of all of a series of related patents” matters to this
 9 inquiry, *Hyatt*, 998 F.3d at 1364, Google largely tries to ignore everything in the ’885 and ’966
 10 patents’ priority chain except for the September 2006 provisional application. E.g., Google Br. at
 11 5-6. Thus, it protests that Sonos waited “thirteen years” after the provisional application to
 12 disclose and claim overlapping zone scenes. *Id.* at 6, 8. Sonos did no such thing. As explained
 13 more fully below (10-11), Sonos first disclosed overlapping zone scenes in the 2006 provisional
 14 application, and also in the 2007 non-provisional application. And Sonos incorporated the 2006
 15 provisional application and the 2007 non-provisional specification by reference into every one of
 16 Sonos’s later non-provisional applications all the way until 2019.

17 Google says nothing about the *other* four applications in the patents’ direct priority chain
 18 (filed between 2007 and 2016) except that the chain is “confusing.” Google Br. at 8; see Dkt. 723
 19 at 4 (chart of priority chain). “Confusing” does not mean there was any unreasonable delay.
 20 Google has *no evidence* that Sonos ever tried to delay prosecution of any of the applications in the
 21 chain, much less that the priority chain confused the PTO. Likewise, Google offers *no evidence*
 22 that those applications contained an inordinate amount of materials or troubled the PTO in any
 23 way. Contrast that with the prosecution history in *Hyatt*, where the patentee “bulk-filed” nearly
 24 400 applications, each of which was “a photocopy of one of 11 earlier parent applications,” and
 25 then spent eight years amending the applications until they had “a total of approximately 115,000
 26 [claims], including approximately 45,000 independent claims.” 998 F.3d at 1353. *PMC*’s facts
 27 are nearly identical. The patentee bulk-filed more than 300 applications that “derive[d] from two
 28 earlier applications” and each contained only “a single claim” to start with, and then the patentee

1 amended the applications until the number of claims ballooned to “the range of 6,000 to 20,000.”
 2 57 F.4th at 1350-51. And there, the patentee also “expressly adopt[ed] and implement[ed]
 3 dilatory prosecution strategies, specifically to ambush companies like Apple many years after
 4 PMC filed its applications.” *Id.* at 1354. There is no evidence of any such strategy here.

5 *Second*, Sonos never abandoned any of the applications in the priority chain for the ’885
 6 and ’966 patents. Thus, Google has no evidence that Sonos filed any applications that served
 7 only to delay and keep the chain alive. Nor would Sonos have had any reason to do that. Under
 8 the post-1995 law, delaying a patent’s issuance functionally shortens its term (and any damages
 9 period) because the filing date of the relevant application remains unchanged. In *Bogese*, by
 10 contrast, the patentee would “receiv[e] a final rejection from the PTO, not amend[] his application
 11 or claims, fil[e] a file wrapper continuation application exactly or almost exactly six months later
 12 without any amendments,” and then “abandon[] his prior application” so he could keep the
 13 rejected claims alive. 303 F.3d at 1364; *see Reiffin*, 270 F. Supp. 2d at 1148 (just before a patent
 14 would issue, the patentee abandoned the application for a continuation and then “failed to pay the
 15 issuance fee” on the later application, again filing a new continuation).

16 *Third*, the only evidence is that Sonos diligently prosecuted the ’885 and ’966 patents.
 17 Indeed, as Google concedes, Sonos expedited their prosecution. Google Br. at 7. Sonos filed
 18 both applications in April 2019; the ’966 patent issued in November 2019, TX0001 at 3, and the
 19 ’885 patent issued in November 2020, TX0003 at 3. Google tries to portray the expedited
 20 prosecution as a knock on Sonos. Google Br. at 7. But expedited “Track One” examination did
 21 not become available until late 2011, so Sonos could not have expedited the 2007 application.
 22 USPTO, *Prioritized Examination: Frequently Asked Questions*, at 2, <https://www.uspto.gov/sites/default/files/documents/pe-faq.pdf>. Moreover, Sonos’s election of Track One examination shows
 23 that it was using the patent system reasonably. The goal of a “Track One” application is to
 24 expedite prosecution of an application, not delay it. Track One examination is available only for
 25 applications with “no more than four independent claims” and “thirty total claims.” *Id.* By
 26 contrast, the *Hyatt* applications contained “an average of 398 claims” each. 998 F.3d at 1353.
 27

28

1 *Fourth*, Google has no evidence that Sonos’s applications were difficult for the PTO to
 2 examine. Google says that Sonos buried the PTO “in over 70,000 pages of materials submitted
 3 during prosecution of the two patents-in-suit,” thus mimicking the *Hyatt* patentee, who filed
 4 “atypically long and complex” specifications “spanning as many as 576 pages of text.” Google
 5 Br. at 6 (quoting *Hyatt*, 998 F.3d at 1353); *id.* at 8. But Google is comparing apples to oranges.
 6 The ’885 patent’s specification, including the list of references cited, diagrams, and certificates of
 7 correction, amounts to only 50 pages total—less than a tenth the size of the *Hyatt* specifications.
 8 TX0003. Likewise, the ’966 patent’s specification, counting the same components, is only 40
 9 pages long. TX0001. There is nothing “atypically long and complex” about those documents.

10 As for the 70,000 pages of submitted materials, Google offered no evidence to show that
 11 this amount of material (which includes many PTO office actions and litigation filings, *see e.g.*,
 12 TX0003 at 12-14, that are not prior art) is unusual, especially for a patent family of this size, or
 13 that the PTO had any trouble processing Sonos’s applications. Compare that to *Hyatt*, where the
 14 trial evidence showed “that multiple characteristics of Hyatt’s application and claim web, when
 15 combined, made it effectively impossible for the PTO to process them.” 998 F.3d at 1368. And
 16 of course, applicants “have ‘a duty of candor and good faith in dealing with the [PTO], which
 17 includes a duty to disclose to the [PTO] all information known to that individual to be material to
 18 patentability.’” *In re Queen’s Univ. at Kingston*, 820 F.3d 1287, 1304 (Fed. Cir. 2016) (quoting
 19 37 C.F.R. § 1.56). An applicant is not relieved of its duty to disclose to the PTO simply because
 20 an adversary might later contend that there was too much material. In fact, Google even
 21 suggested during trial that Sonos erred by not submitting *more* materials to the PTO, such as the
 22 source code for the Sonos 2005 system and the Squeezebox system. Trial Transcript (“Tr.”) at
 23 1508:7-10, 1509:6-10 (Schonfeld); *see also id.* at 1894:21-22 (Mr. Pak arguing during closing
 24 that “[this] is all evidence, including the source code, testing, all of that that the patent examiner
 25 never saw”). Google cannot have it both ways.

26 *Fifth*, Google has no evidence that Sonos tried to cover Google’s products with the claims
 27 in the ’885 and ’966 patents. Google suggests that Sonos obtained “claims that read on [its]
 28 competitors’ products.” Google Br. at 5, 10 (quoting *Bogese*, 303 F.3d at 1369). But (1) Google

1 has no evidence that Sonos intentionally drafted claims to cover Google’s products; and (2) by
 2 definition, infringed claims reads on the infringer’s product. If Google agrees that it infringes the
 3 ’885 patent, then Google should drop its objection to the jury’s infringement verdict and limit its
 4 arguments to whether substantial evidence supports the jury’s finding of validity.

5 Regardless, even if Sonos intentionally drafted claims to cover Google’s products, the
 6 Federal Circuit has repeatedly made clear that there is nothing “improper, illegal or inequitable”
 7 with drafting claims to read on a competitor’s product. *See, e.g., Kingsdown Med. Consultants,*
 8 *Ltd. v. Hollister Inc.*, 863 F.2d 867, 874 (Fed. Cir. 1988) (“[T]here is nothing improper, illegal or
 9 inequitable in filing a patent application for the purpose of obtaining a right to exclude a known
 10 competitor’s product from the market; nor is it in any manner improper to amend or insert claims
 11 intended to cover a competitor’s product the applicant’s attorney has learned about during the
 12 prosecution of a patent application.”); *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 909
 13 n.2 (Fed. Cir. 2004) (“[I]t is not improper for an applicant to broaden his claims during
 14 prosecution in order to encompass a competitor’s products, as long as the disclosure supports the
 15 broadened claims.”). The Court has also recognized that “it’s perfectly okay to do that.” Tr. at
 16 747:4-20. But in any event, as explained below and in previous briefing, Dkt. 723, Dkt. 809,
 17 Sonos disclosed overlapping zone scenes to the PTO in 2006, long before Google developed its
 18 infringing products.

19 *Sixth*, Google argues that Sonos “did not add the new matter allegedly covering
 20 overlapping speaker groups” to its specifications until 2019, thereby depriving Google of “public
 21 disclosure or notice that Sonos would attempt to claim overlapping speaker groups.” Google Br.
 22 at 6-7; *id.* at 8-9. This is both irrelevant to prosecution laches and wrong.

23 Even assuming that Google accurately represents the sequence of events, the contention
 24 about new matter pertains to the priority date, not prosecution laches. If the 2019 amendment to
 25 the specification lacked support in the 2006 provisional, then as Sonos explained, at worst it had
 26 ample other support in the 2007 non-provisional. Dkt. 723 at 24-32. So any problem with
 27 incorporation by reference of the provisional application’s appendix would mean, at most, that
 28 Sonos would not be entitled to a 2006 priority date but rather to a 2007 priority date. *Id.* That

would make no difference in this case based on the prior art that Google has relied on, and it has no bearing on prosecution laches. In arguing otherwise, Google is trying to avoid the “especially weighty presumption of correctness” that attaches to the PTO’s allowance of an amendment, *Commonwealth Sci. & Indus. Res. Org. v. Buffalo Tech. (USA), Inc.*, 542 F.3d 1363, 1380 (Fed. Cir. 2008), and the clear-and-convincing standard, by smuggling this argument under prosecution laches, which Google wrongly believes requires proof only by a preponderance of the evidence.

Moreover, Google’s claim that “Sonos concealed the nature of its alleged invention until well after Google” “commercialized” smart speakers is demonstrably false. Google Br. at 8. Google says that it started developing its infringing products by 2015. *Id.* at 12. The disclosure of overlapping zone scenes that Sonos added to the patents’ specifications by amendment in 2019 first appeared in an appendix incorporated by reference to the 2006 provisional application, which became public on July 9, 2013. Dkt. 723 at 5, 9. And the applications for the ’885 and ’966 patents both incorporated by reference, among other things, the 2006 provisional application (and appendix) and the 2007 non-provisional application that issued in 2013. *Id.* at 12-13; *see also id.* at 4 (priority chain for both patents). Thus, by 2013, Google should have known that Sonos’s disclosure covered overlapping zone scenes.² *Id.* at 18.

Even outside the context of patent prosecution, by the time the 2006 appendix became public in 2013, Google was well aware of Sonos’s innovation. In June 2013, Google engineer Chris Yerga told Sonos’s then-VP of Product Development, Nick Millington, that Google had been “internally” discussing integrating its music-streaming service with Sonos’s products and “hope[d]” to “begin officially engaging on that front soon.” TX0344 at 2; Tr. at 299:21-302:3 (Millington). The two companies officially met on July 16, 2013—after the 2006 appendix became public—to discuss the possibility of integrating Google’s streaming service with Sonos’s products; Sonos even gave Google’s engineers “ZonePlayers and the controllers” at the meeting. Tr. at 302:11-305:11 (Millington); TX0347 (planning email for the meeting). After that meeting,

² The PTO’s regulations expressly allow applicants to amend a specification to insert “material incorporated by reference into the specification” as long as the amendment “contains no new matter.” 37 C.F.R. § 1.57(g). And when a validity challenge rests on purported “new matter, the fact that the [PTO] has allowed an amendment without objection,” as it did here, receives “an especially weighty presumption of correctness.” *Buffalo Tech.*, 542 F.3d at 1380.

1 Google had ample reason to investigate Sonos's patent family. Had Google done so, it would
 2 have found Sonos's Patent No. 8,483,853 ("the '853 patent") and "seen that it incorporated by
 3 reference the [2006] provisional application." Dkt. 723 at 43. If Google chose to stick its head in
 4 the sand and not investigate Sonos's IP, that is not Sonos's fault.³

5 **3. Google did not suffer any prejudice.**

6 The prejudice element of prosecution laches requires proving that the infringer acquired
 7 "intervening rights"—"that is, that the accused infringer or others 'invested in, worked on, or
 8 used the claimed technology during the period of delay.'" *Hyatt*, 998 F.3d at 1362 (quoting
 9 *Cancer Research*, 625 F.3d at 729). Google contends that, during the roughly 13 years between
 10 the September 2006 provisional application and the April 2019 applications for the '885 and '966
 11 patents, it "began investing in its products by at least 2015." Google Br. at 12. As explained
 12 above, however, there is not a 13-year gap in the prosecution history. Sonos prosecuted other
 13 applications in the priority chain during those years, eventually acquiring other patents in the
 14 same family that are *broader* than the '885 and '966 claims, meaning they encompass but do not
 15 *require* overlapping zone scenes. Dkt. 723 at 4. Thus, Google could not have been prejudiced by
 16 Sonos's later filing of the patents in suit, which had narrower claims that covered zone scenes

17 And as Sonos has explained, Sonos disclosed overlapping zone scenes to the PTO in 2006
 18 and again in 2007. Dkt. 723 at 4-9. And while *disclosure to the PTO*, not *publication*, matters
 19 for the priority date, the 2006 disclosure was also made public in 2013, *id.* at 5, 9, two years
 20 before Google says it started investing in its infringing products. So whatever rights Google
 21 acquired in its infringing products were not "intervening," and Google suffered no prejudice.

22 Because Google has not shown either element of prosecution laches—and because
 23 prosecution laches does not apply to post-GATT patents in the first place—the Court should enter
 24 judgment against Google on its affirmative defense of prosecution laches.

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 26
 27

³ Google also forfeited any argument about "new matter" many times over. *See, e.g.*, Dkt. 723 at
 28 43-45. In fact, Google conceded that the '885 and '966 patents were entitled to a December 2005
 conception date, which it could not have done if it believed that the 2019 amendment added new
 matter. Dkt. 809 at 6-11.

1 **B. Google Is Not Entitled To Judgment In Its Favor On Its Equitable Estoppel**
 2 **Affirmative Defense.**

3 As Google is well aware, Sonos tried for many years to get Google to take a license to
 4 Sonos's patents—including specifically Sonos's zone scenes patents. That course of dealing
 5 could not remotely create the impression that Sonos did not intend to enforce its patent rights—
 6 either generally or with respect to zone scenes patents specifically. In fact, a reasonable actor in
 7 Google's shoes ought to have anticipated Sonos would assert its IP rights given the repeated
 8 communications Sonos had with Google concerning Google's infringement.

9 Sonos's repeated attempts to have Google take a license to its patents fails to satisfy any
 10 of the three required elements of equitable estoppel: "(1) the patentee's misleading conduct leads
 11 the alleged infringer to reasonably infer that the patentee does not intend to enforce the patent
 12 against him; (2) the alleged infringer relies on that conduct; and (3) the alleged infringer will be
 13 materially prejudiced if the infringement claim moves forward." *IT Casino Sols., LLC v.*
Transient Path, LLC, No. 21-CV-09872-WHO, 2022 WL 4913526, at *6 (N.D. Cal. Oct. 3, 2022)
 14 (citing *ABB Robotics, Inc. v. GMFanuc Robotics Corp.*, 52 F.3d 1062, 1063 (Fed. Cir. 1995)).

15 All "[t]hree elements are required to prove estoppel." *ABB Robotics*, 52 F.3d at 1063.
 16 A defendant advancing estoppel is entitled to "no presumption[s]" in their favor as part of "an
 17 estoppel defense," and accordingly as the "party advancing an estoppel defense must prove each
 18 of the elements thereof." *Id.* at 1063-64.

19 **1. Sonos did not mislead Google into reasonably inferring that it would**
 20 **not enforce the '885 and '966 patents.**

21 a. **Sonos gave notice of Google's infringement of the '885 patent**
 22 **shortly after it issued, gave pre-suit notice of the '966 patent,**
 23 **and had given Google notice of closely related zone scenes**
 24 **patents for years before that.**

25 Sonos did not mislead Google into inferring that Sonos did not intend to enforce the '885
 26 and '966 patents against Google. *See ABB Robotics*, 52 F.3d at 1063-64. And in any event, any
 27 such inference on Google's part would not have been "reasonabl[e]." *Id.* Because Google cannot
 28 establish this required element of equitable estoppel, Google's claim fails as a matter of law.

1 As a threshold matter, Google does not and cannot identify any misleading statement or
 2 affirmative act by Sonos. *Cf.* Google Br. at 19-20 (arguing that “Sonos’s Conduct and Silence
 3 Was Misleading” but discussing only Sonos’s “silence”). That matters because a patentee may
 4 mislead by silence only “if such silence is accompanied by some other factor indicating that the
 5 silence was sufficiently misleading to amount to bad faith.” *ABB Robotics*, 52 F.3d at 1064.

6 Here, there is no factual dispute that Sonos gave Google notice of infringement of the
 7 ’885 patent just *weeks* after the ’885 patent issued (by which time Google was already on notice
 8 of its infringement of the parallel ’966 patent). *See, e.g.*, Case No. 3:21-cv-7559, Dkt. 39
 9 (Sonos’s January 2021 motion for leave to amend to add a claim for infringement of the ’885
 10 patent). And when Sonos gave Google pre-suit notice of its infringement of the ’966 patent in the
 11 year after issuance, Google already had enough familiarity with Sonos’s claims of infringement
 12 of zone scene patents—both from the parties’ multi-year licensing discussions (which
 13 undisputedly included notice of zone scene patents directly related to the ’885 and ’966 patents)
 14 and from Sonos’s ITC litigation against Google—that Google was able to file the declaratory
 15 judgment action in this case in a matter of hours, something it could not have done without weeks
 16 or months of studying Sonos’s patents.⁴ *See* Tr. at 720:1-10. Similarly, there is no factual dispute
 17 that since Sonos first gave Google notice of infringement, Sonos has *never* suggested Sonos
 18 would abandon its infringement claim. Just the opposite, Sonos repeatedly put Google on notice
 19 of its infringement of Sonos’s zone scene patents for *years* before filing suit—a period of
 20 *increasing* assertion of patent rights by Sonos against Google; hardly something designed to lull
 21 Google into complacency.

22 **b. Google cannot identify a single case finding equitable estoppel**
 23 **based on an alleged failure to claim an aspect of an invention**
 24 **quickly enough.**

25 Because Sonos repeatedly put Google on notice of Google’s need to take a license to
 26 Sonos’s zone scenes patents, Google repackages its prosecution laches claim as an equitable

27 ⁴ For the avoidance of doubt, Sonos could not have given Google notice of the ’885 or ’966
 28 patents during its yearslong negotiations with Google because these patents did not exist yet.
 Instead, Sonos accused Google of infringing ancestors to the ’885 and ’966 patents, including,
 among others, the ’853, ’228, and ’206 patents.

1 estoppel claim, arguing that Sonos was required to *claim* the invention of the '885 and '966
 2 patents in 2014 instead of 2019. Google Br. at 19-20; *see, e.g., id.* at 20 (“If Sonos had a
 3 colorable claim on the invention, Sonos could have and should have notified Google and
 4 immediately filed a continuation or a continuation-in-part, rather than sit silently on the patent
 5 application for five years.”). But Google cites no legal authority finding equitable estoppel based
 6 on an alleged failure to claim an aspect of the patentee’s invention quickly enough.

7 The closest Google comes to attempting to support its legal argument is to cite *Wang*
 8 *Labs*, which Google says proves that Sonos “need[ed] to *disclose* its claimed invention covering
 9 overlapping zone scenes [before] the patents issued.” Google Br. at 20 (emphasis added) (citing
 10 *Wang Labs., Inc, v. Mitsubishi Elects. Amer., Inc.*, 103 F.3d 1571, 1582 (Fed. Cir. 1997)). But
 11 Google is wrong that Sonos failed to disclose its invention—and *Wang Labs* is both legally and
 12 factually inapposite.

13 *Wang Labs* does not support Google’s argument that equitable estoppel may be satisfied
 14 based on a patentee’s failure to provide notice prior to issuance of a patent of the patentee’s intent
 15 to sue. In fact, the result in *Wang Labs* on which Google relies came in the context of the Federal
 16 Circuit’s analysis of whether estoppel principles supported a finding of *implied license*. *See, e.g.*,
 17 103 F.3d at 1382 (“[W]e affirm the judgment regarding Mitsubishi’s implied license defense”).
 18 And in this case, Google has abandoned its implied license defense. *Compare, e.g.*, Dkt. 615 at 3
 19 (Google representing that it would try implied license defense) *with* Google Br. (presenting only
 20 laches and estoppel defenses). And while *Wang Labs* did affirm an implied license finding, the
 21 Federal Circuit did so while recognizing that the facts in the case *did not* support a finding of
 22 equitable estoppel. *See* 103 F.3d at 1581 (describing the “typical equitable estoppel situation” by
 23 way of contrast and noting that “both the jury, in its advisory capacity, and the district court
 24 decided against Mitsubishi on the defense of equitable estoppel *per se*”).

25 Even if *Wang Labs* had found equitable estoppel, the facts of *Wang Labs* bear no
 26 resemblance to the course of dealing between the parties here. The patentee, Wang Labs,
 27 advanced a full court press to have its SIMM technology adopted as a JEDEC standard while “not
 28 inform[ing] JEDEC of its ongoing pursuit of patent rights in the SIMM” and in parallel

1 “repeatedly requested that Mitsubishi manufacture SIMMs,” going so far as to “suppl[y] drawings
 2 and other details to Mitsubishi.” 103 F.3d at 1575. There are, of course, no allegations in this
 3 case that Sonos encouraged Google to adopt zone scenes technology while secretly patenting the
 4 invention—because nothing remotely similar happened here.

5 What’s more, at Wang Labs’ behest, Mitsubishi began making products “similar to
 6 Wang’s, for sale to Wang and others,” and giving Wang favorable pricing treatment. 103 F.3d at
 7 1575. The parties extensively discussed the new products and Mitsubishi even “complied” with
 8 Wang’s suggestion that Mitsubishi “modify its SIMM” to make the design closer to “the original
 9 Wang design.” *Id.* Mitsubishi mass produced the products, Wang bought them, and “Wang
 10 never informed Mitsubishi of its patent applications, patents, or of any intent to execute a license
 11 or receive royalties until a December 22, 1989 letter accusing Mitsubishi of infringing the ’605
 12 and ’513 patents, which had issued in 1987 and 1988 respectively.” *Id.* at 1575-76.

13 Notably, Google points to no analogous conduct by Sonos, nor any argument that *Wang*
 14 *Labs* extends to equitable estoppel claims. Google therefore has no factual or legal support for its
 15 argument that Sonos “need[ed] to **disclose** its claimed invention covering overlapping zone
 16 scenes [before] the patents issued,” and the Court should deny Google’s request for the
 17 application of equitable estoppel.

18 c. **Google does not, and cannot, claim that Sonos lulled Google**
 19 **into complacency by first asserting and then abandoning a**
 claim of infringement—the ordinary case of equitable estoppel.

20 *Wang Labs* explains that “a typical equitable estoppel situation” occurs when “(1) the
 21 infringer knows of the patent, (2) the patentee objects to the infringer’s activities, (3) but the
 22 patentee does not seek relief until much later, (4) thereby misleading the infringer to believe the
 23 patentee will not act.” 103 F.3d at 1581. *See also, e.g., Aspex Eyewear Inc. v. Clariti Eyewear,*
 24 *Inc.*, 605 F.3d 1305, 1310 (Fed. Cir. 2010) (“[I]ntentionally misleading silence arises when a
 25 patentee ‘threatened immediate or vigorous enforcement of its patent rights but then did nothing

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1 for an unreasonably long time.”” (quoting *Meyers v. Brooks Shoe, Inc.*, 912 F.2d 1459, 1464 (Fed.
 2 Cir. 1990))). Google does not even contend that the evidence in this case meets that scenario.⁵

3 *ABB Robotics* provides an example of precisely that prototypical case, and the facts of that
 4 case illustrate just how far afield Google’s equitable estoppel argument is. In *ABB Robotics*, the
 5 ’536 patent issued in 1978 and was assigned to the patentee, Cincinnati Milacron (“CM”). 52
 6 F.3d at 1063. Then, “[b]etween 1984 and 1986,” CM and accused infringer GMFanuc Robotics
 7 (“GMF”) corresponded and met regarding CM’s position that GMF infringed the ’536 patent. *Id.*
 8 After GMF denied that it infringed in September 1986, CM took no further action, and
 9 affirmatively “decided not to sue [the defendant] for infringement of the ’536 patent.” *Id.*
 10 Instead, “during this time period” CM and GMF “discussed other CM patents as well and as a
 11 result, GMF took a license” to those patents. *Id.* But in 1988, the patentee CM granted *ABB* “an
 12 exclusive license under the ’536 patent,” and in 1991, *ABB* charged GMF with infringement,
 13 filing suit in 1992. *Id.* The Federal Circuit found that *ABB* was equitably estopped from suing
 14 GMF for infringement.

15 The facts here are precisely the opposite. For example, even the redacted version of
 16 TX6130 shown to the jury makes clear that Sonos put Google on notice of its infringement prior
 17 to sending Google a courtesy copy of the complaint in this case. As Ms. Kwasizur wrote to
 18 Google counsel Bradley Riel and Tim Kowalski in September 2020, “[i]n **this** lawsuit, Sonos will
 19 focus on Google’s infringement of [the ’615, ’206, ’966, and ’460 patents] although, **as we have**
 20 **discussed, Google infringes many more of Sonos’s patents.**” TX6130 (emphasis added). Ms.
 21 Kwasizur further stated: “We *continue* to be hopeful that Google will **reconsider its**
 22 **infringement.**” *Id.* (emphasis added). That communication alone makes clear that Sonos had not
 23 been silent regarding Google’s infringement; even this single exhibit is enough to defeat Google’s
 24 equitable estoppel defense. As the Court instructed the jury, the email “is telling the other side
 25 **how unreasonable they’ve been.**” Tr. at 1027:12-14 (emphasis added). While Google may

26 ⁵ As an initial matter, Google does not contend it was aware of the asserted patents any earlier
 27 than when Sonos provided notice to Google of these patents. If Google is now conceding that it
 28 had earlier notice of either the ’885 or ’966 patents (in direct contravention to what it
 represented to Sonos and the Court numerous times over the course of the litigation and trial), it
 should say so.

1 dispute that it was acting unreasonably, it cannot dispute that the parties had extensive
 2 communications regarding Google's infringement of zone scenes patents prior to this suit, which
 3 TX6130 makes clear. Google's narrative, which conveniently ignores every communication
 4 between the parties between "Cast for Audio" presentation and the trial, conveys a false story that
 5 Sonos was silent up until this litigation, which is neither true nor supported by the trial record.
 6 *See also, e.g.*, TX6136 (detailing Sonos's allegations regarding Google's years-long pattern of
 7 infringement); Tr. at 1043:2-16 (TX6136 admitted "to show notice of the patents and the
 8 allegation of infringement").

9 And while Google successfully excluded a host of related facts from the jury, this Court
 10 cannot ignore them now. As the Court is aware, Sonos's Alaina Kwasizur was prepared to testify
 11 regarding Sonos's *yearslong* effort to get Google to take a license to Sonos's zone scene patents.
 12 Dkt. 705. Google successfully excluded that evidence by arguing that it was unduly prejudicial
 13 and (mis)representing to the Court that it was not relevant to the issues to be tried,⁶ despite
 14 apparently planning to base its affirmative defense claim on Sonos's "silence" with regard to its
 15 patent rights, Google Br. at 1, 13, 19, 20, 21. Google cannot simultaneously argue that evidence
 16 of earlier negotiations between the parties is *not* relevant but Sonos's inability to present that very
 17 same evidence *is* relevant. *See, e.g.*, *New Hampshire v. Maine*, 532 U.S. 742, 749 (2001).

18 As Sonos explained in proffering Ms. Kwasizur's testimony, but for the Court's exclusion
 19 of that testimony at Google's behest, Ms. Kwasizur would have testified to Sonos's repeated
 20 communications to Google regarding Google's infringement of Sonos's patent portfolio and zone
 21 scene patents. Dkt. 705 at 3. Specifically, Sonos put Google on notice of Google's infringement
 22 beginning in 2016, shortly after Google's initial competing products came onto the market. *Id.*
 23 Sonos continued to notify Google of infringement during the period 2016 to 2019, providing
 24 Google with multiple detailed presentations and letters, as well as claim charts for hundreds of
 25 Sonos patents. *Id.* Notably, this notice included repeated communications to Google regarding

26
 27 ⁶ For example, in response to Sonos's proffer of Ms. Kwasizur's testimony, Google argued that
 28 "introducing evidence regarding these protracted and complicated licensing negotiations has little
 to **no relevance to any issue** in the case," and sought to exclude the proffered testimony "under
 Rule 403." Dkt. 715-3 at 8 (emphasis added).

1 Google's infringement of patents in the zone scene patent family. *Id.* For example, Sonos told
 2 Google that it was infringing the '853 patent in September and October 2016. *Id.* at 3-4. The
 3 '853 patent is the first issued patent in the zone scene patent family. *Id.* And at an October 25,
 4 2016 in-person meeting between Sonos and Google, Sonos showed Google another zone scene
 5 patent—U.S. Patent No. 8,843,228 (“the '228 patent”), which is the great grandparent to the '966
 6 and '885 patents. *Id.* at 4. Sonos highlighted the '228 patent to Google again (1) at a presentation
 7 that Sonos gave to Google in January 2018, with a detailed explanation of how Google's products
 8 practiced the '228 zone scene patent, including both the ability to create persistent zone scenes
 9 and invoke those zone scenes using Google's app, (2) with a claim chart illustrating Google's
 10 infringement of this patent, provided in February 2019, and (3) in a June 2019 presentation and
 11 email in which Sonos also highlighted its zone scene patent family more broadly. *Id.* Sonos also
 12 put Google on notice that Sonos “keeps the patent families alive,” which means that Sonos
 13 typically files additional child applications based on their existing patent applications. *Id.* This
 14 statement, combined with Sonos's notice of Google's infringement of earlier patents in the same
 15 family, put Google on notice that additional patents in the zone scene patent family would be filed
 16 and that Google needed to be aware of those patents in order to monitor for infringement. *Id.* In
 17 the face of this evidence, Google has no basis for arguing that Sonos sat silently as Google
 18 introduced infringing products into the market.

19 This proffered testimony was also confirmed by the two exhibits that the jury did have,
 20 albeit in redacted form, and the related testimony it heard regarding TX6130 and TX6136. Ms.
 21 Kwasizur's statements to Google's lawyers in TX6130 that “as we have discussed, Google
 22 infringes many more of Sonos's patents,” her reference to “**this** lawsuit,” and her statement that
 23 Sonos “continue[s] to be hopeful that Google will reconsider its infringement” all make clear that
 24 the parties had previously discussed Sonos's allegations of infringement. TX6130 (emphasis
 25 added); Tr. at 1025:15-22 (identifying email); TX6136 (detailing Sonos's allegations regarding
 26 Google's years-long pattern of infringement); Tr. at 1041:6-1042:10 (identifying complaint).⁷

27
 28 ⁷ Sonos also objected to the admission of redacted versions of these exhibits. Tr. at 1754:22-
 1755:11.

1 This course of dealing between the parties stands in marked contrast to the facts of *ABB*
 2 *Robotics*, and the “typical” case of equitable estoppel described in *Wang Labs*, and Google offers
 3 no explanation as how its claim survives in light of Sonos’s years-long effort to get Google to
 4 take a license to Sonos’s zone scene patents. Moreover, Google’s misleading characterization of
 5 the course of dealing between the parties is premised entirely on Google’s exclusion of relevant
 6 rebuttal evidence—based on Google’s representation to the Court that this evidence was not
 7 “relevan[t] to any issue in the case.” Dkt. 715-3 at 8. The Court can and should deny Google’s
 8 request for equitable estoppel on this basis alone.⁸

9 d. **Google relies on course of dealing evidence that it represented**
 10 **to the Court was not relevant to zone scenes or “overlapping**
speaker group technology.”

11 At trial, Google sought to preclude Sonos from presenting any evidence on Google’s Cast
 12 for Audio program by arguing that this evidence was only relevant to now-dismissed patents.
 13 Prior to Mr. Millington’s testimony, Google objected to evidence “relat[ing] to something called
 14 Cast for Audio, ***which is not the accused technology in this case.***” Tr. at 189:15-22 (emphasis
 15 added). Google represented that “Cast for Audio” evidence related only to the ’615 and ’033
 16 patents that the Court dismissed prior to trial and Google’s related counterclaims, which Google
 17 withdrew with prejudice:

18 Those all relate to something called Cast for Audio, ***which is not the accused***
 19 ***technology in this case.***

20 If Your Honor recalls, we had the other ***two patents relating to the Cloud [queue]***
 21 ***collaboration between the companies. We had withdrawn our counterclaims***
relating to those issues.

22 This series of meetings has ***nothing to do with the overlapping speaker group***
 23 ***technology at issue in this case*** from the perspective of Sonos.

24
 25 ⁸ The Court can consider the proffered testimony as part of the record here. Sonos offered sworn
 26 testimony which was filed on the docket in this case during trial. Google should not be heard to
 27 complain that it was deprived of its ability to cross-examine Ms. Kwasizur when its
 28 representation on relevance to the Court is the reason that she was prevented from testifying on
 this topic. If Google wanted to cross-examine Ms. Kwasizur on this topic at trial, it should have
 disclosed that the basis for its equitable estoppel claim was Sonos’s “silence” and not
 incorrectly represented to the Court that her testimony was not “relevan[t] to any issue in the
 case.” Dkt. 715-3 at 8.

1 So it's our contention that we are now getting into a – a series of documents and
 2 meetings that have ***no relevance to the issues in this case***, number one;

3 Tr. at 189:21-190:6 (emphasis added). Google similarly sought to exclude TX0358, noting that
 4 “this related to also some of these Cast for Audio discussions, actually.” *Id.* at 243:13-244:6.

5 Google doubled down on this argument. Two days later, Sonos explained once again that
 6 “[t]he word ‘cast’ is used by Google like an umbrella, it’s a very broad term,” making clear “we
 7 are not getting into anything on direct control at all,” but that “[t]he word ‘cast’ is showing up
 8 again because the accused products are the Google Chromecast audio, the Google Home app used
 9 to be called the Chromecast app, and before that it was actually known as just the Cast app.” Tr.
 10 at 582:21-583:3. The Court asked the parties point blank about this issue, stating “[t]hat is strictly
 11 zone scenes is the relevance[,]” to which Sonos replied in the affirmative. *Id.* at 583:18-20. The
 12 Court asked Google: “Is that true?” and counsel for Google responded “No, your Honor.” *Id.* at
 13 583:21-22. Google explained why—because, according to Google, Cast for Audio had nothing to
 14 do with zone scenes:

15 MR. PAK: So as we noted, Mr. Shekel, ***his video testimony that they are trying to***
 16 ***designate in their case-in-chief is all about the 2013 and '14 meetings where Cast***
for Audio –

17 THE COURT: Oh. You were talking about Mr. Mo?

18 MR. PAK: Oh, Mr. Mo, absolutely. So this has – ***he has no knowledge -- none of***
the testimony is tethered to the Home app or the grouping functionality.
 19 All of the testimony that they have designated is simply about YouTube, YouTube
 20 Music and ***casting technology***, as we laid out in our briefing. ***So we think that is***
either irrelevant and confusing to the jury or if they want to play it, then I think we
 21 should be able to say YouTube and YouTube Music were some of the specific
 22 accused technologies.

23
 24 *Id.* at 583:21-584:10 (emphasis added). The Court noted its confusion with Google’s argument
 25 that Cast for Audio had *no* relevance to zone scenes in light of Sonos’s explanation:

26 [THE COURT:] But I -- here you both are telling me exactly the opposite things.
 27 One of you is saying it’s only relevant for zone scenes. The other one is saying no,
 28 it’s also -- they are going to try to make an argument about casting.
 Are you telling me the truth? I’m going to go ask you each. Are you telling me
 the truth, Mr. Pak?

1 **MR. PAK:** On Mr. Mo and Mr. Shekel's testimony *we believe this is relating to*
 2 *the Cast for Audio* and the YouTube music.

3 *Id.* at 584:17-25 (emphasis added). In other words, according to Google, the testimony that it
 4 now cites for support for its equitable estoppel argument was not relevant to zone scenes.
 5 Similarly, Google represented that designated portions of Mr. Shekel's testimony were not
 6 relevant to trial because “[t]his is about his meeting with Mr. Millington and others in 2013 and
 7 '14 to talk about a technology called *Cast for Audio*, which, again, that is the technology that
 8 they were trying to accuse for the [cloud queue] patents; *has nothing to do with this case.*” *Id.* at
 9 586:9-15 (emphasis added). Google even fought to make sure that Mr. Shekel was not referred to
 10 as a “product manager familiar with Google’s multizone technology” because according to
 11 Google Mr. Shekel’s testimony related only “to the 2013, 2014 cast audio technology meeting,”
 12 such that it was “not true” that Mr. Shekel was familiar with Google’s multizone technology. *Id.*
 13 at 590:14-22. As Google argued, “the testimony that’s being given is *not related to* multizone
 14 technology” but instead is about the “2013, 2014 set of meetings about *Cast for Audio*.” *Id.* at
 15 591:9-15.

16 After the testimony was played, Google once again argued that Cast for Audio *only*
 17 related to the ’033 and ’615 patents that “were invalidated”:

18 **MR. PAK:** There was a specific testimony relating to the *Cast for Audio* meeting
 19 that occurred and the document – we can brief this further, Your Honor -- but the
 20 document that was introduced into evidence is for the *Cast for Audio* document.

21 And there was a suggestion in the questioning that there were meetings that occurred
 22 between employees of Sonos, employees of Google related to *Cast for Audio*.

23 So the issue is now they have injected cast. I think we should be able to respond
 24 that cast is Google technology; and, therefore, any meetings that occurred about
 25 *Cast for Audio* is involving our technology. *Their patents on that technology were*
 26 *invalidated*. And that would be the argument that we would make.

27 Tr. at 707:8-20 (emphasis added). Google then filed an entire brief arguing that “Cast for Audio”
 28 related only “to Sonos’s invalidated cast patents.” Dkt. 702 at 1.

29 Now, Google’s equitable estoppel claim apparently relies on the idea that Sonos should
 30 have disclosed zone scenes (including non-existent patents that would not be filed until 2019) to

1 Google following the 2014 Cast for Audio presentation. The Court should not endorse Google's
 2 new position that Cast for Audio includes zone scenes. Without that evidence, Google has no
 3 basis for arguing that Sonos was misleadingly silent with respect to Sonos's intent to enforce its
 4 zone scene technology.

5 Nor does the trial record support the idea that Google invented zone scenes prior to Sonos.
 6 Google *agreed* that the conception date for overlapping zone scenes was December 21, 2005, Tr.
 7 at 446:18-447:6; id. at 451:2-10—approximately a decade before Google's products came on the
 8 market and years before the Cast for Audio meeting. *See* Dkt. 808 at 10 (Google stating that “the
 9 2005 conception documents provide support for the concept of overlapping zone scenes”). And
 10 there was good reason for Google to stipulate to that conception date. Even focusing on
 11 “overlapping zone scenes” specifically—which is merely one aspect of the claimed invention—
 12 Rob Lambourne, the inventor, explained that his October 21, 2005 notes showed overlapping
 13 zone scenes with, *e.g.*, “the kitchen [that] can be in this sort of downstairs scene as well as the
 14 upstairs and downstairs scene, for example.” Tr. at 454:8-455:3. Similarly, TX0120, an email
 15 Mr. Lambourne wrote in *April 2005*, included an example of overlapping zone scenes. *Id.* at
 16 441:4-442:23; TX0120. In the face of this evidence, Google agreed to drop its derivation
 17 defense—Google's claim that Sonos improperly derived the claimed invention from third parties.
 18 *See* Dkt. 650. As Google recognized prior to trial, there was no merit to contesting Sonos's
 19 December 21, 2005 conception date. Google's equitable estoppel argument is nothing more than
 20 an attempt to rewrite history to avoid the jury's finding that the asserted patents are valid and that
 21 the '885 patent is infringed.

22 **2. Google has not established any evidence of reliance on Sonos's**
 23 **conduct.**

24 For all the reasons discussed above, Google has not and cannot show that Sonos *misled*
 25 Google by silence, affirmative act, or otherwise—the first required element of equitable estoppel.
 26 And as also explained above, Google's claim also bears no resemblance to the “typical” case of
 27 equitable estoppel and is premised on ignoring evidence that Google excluded from trial.
 28 Moreover, as discussed above, Google's claim also fails as a matter of law insofar as it asks the

1 Court to find equitable estoppel based on Sonos’s alleged failure to claim the invention of the
 2 ’885 and ’966 patents quickly enough. For all of these reasons the Court should deny Google’s
 3 request for equitable estoppel. Google’s equitable estoppel defense independently fails because
 4 Google has not established any evidence of *reliance* on Sonos’s conduct—the second required
 5 element of equitable estoppel.

6 Here, Google’s “reliance” argument rests merely on the fact that “Sonos and Google”
 7 “were engaged in an ongoing business and investment relationship.” Google. Br. at 20-21. But
 8 that is often the case between parties engaged in patent litigation; Google’s own cited evidence
 9 proves that this is a typical patent infringement suit, not a rare case of the kind requiring equitable
 10 estoppel. This argument is also a far cry from the course of dealing evidence in *ABB Robotics*,
 11 where the patentee (1) completed negotiations regarding a *different* set of patents, (2) “abrupt[ly]”
 12 stopped corresponding regarding its infringement claim as to the patent in suit, (3) which together
 13 “gave rise to the ‘necessary inference’ that CM’s infringement claim against GMF with respect to
 14 the ’536 patent had been abandoned,” (4) an “inference” that was strengthened by “CM’s
 15 assertion that it would not license GMF under the ’536 patent” and by “GMF’s knowledge that
 16 CM would have to choose between enforcing its patent rights and maintaining its business
 17 relationships with one of its best customers, GM.” 52 F.3d at 1064. Based on all of this
 18 evidence, the trial court, “look[ing] at the conduct of the parties,” “decided that GMF had a
 19 relationship with CM that lulled GMF into a sense of security that it would not be sued.” *Id.*
 20 Google identifies nothing remotely comparable here.

21 And apart from *ABB*, the only authority Google identifies in support of its reliance claim
 22 is *Intel Corp v. Tela*. But that decision—at the pleadings stage—involved allegations that “Tela
 23 failed to mention the possibility of infringement or the need for licensing” until nine years into
 24 the parties’ relationship, and two to three years *after* the patents were issued. *Intel Corp. v. Tela*
 25 *Innovations, Inc.*, No. 3:18-CV-02848-WHO, 2018 WL 4859314, at *8 (N.D. Cal. Oct. 5, 2018).
 26 Here, by contrast, Google faults Sonos for failing to identify specific patent claims to Google
 27 years *before* Sonos filed and secure the patents. More generally, these facts bear little relation to
 28 Sonos’s increasingly vocal assertions to Google, over the period 2016 to 2020, that Google was

1 infringing numerous zone scene patents. Indeed, this litigation between the parties was preceded
 2 by litigation brought by Sonos before the International Trade Commission. *See, e.g.*, Dkt. 823 at
 3 11-12; Dkt. 720-3. That action led to the exclusion of Google’s products from the United States.
 4 That is hardly akin to sitting silently on one’s rights, much less actively misleading a competitor
 5 into thinking that it was free to continue infringing.

6 **3. Google has not established any evidence of prejudice as a result of**
 7 **Sonos’s conduct.**

8 Just as Google has not and cannot establish any evidence of misleading conduct by Sonos
 9 or reliance on Google’s part, Google also has not shown any evidence of prejudice.

10 Google claims that it has been prejudiced for two reasons—first, that because the jury
 11 found Google to be an infringer, “Google will be severely prejudiced both financially by the
 12 damages assessed by the jury and reputationally,” and second, that Google “is further financially
 13 prejudiced because Sonos sat silently on its alleged intellectual property rights and waited while
 14 Google sunk investment into its products.” Google Br. at 21.

15 Google’s first claim for prejudice—financial and reputational harm—is something that
 16 could be claimed by *every* adjudged infringer; that cannot be sufficient to establish equitable
 17 relief that is the exception rather than the rule.

18 As for Google’s second claim for prejudice—its investments in infringing products—
 19 Google fails to note that it intentionally sells the accused products at a loss. For example, in the
 20 context of his *Georgia-Pacific* analysis, Mr. Malackowski testified that he found that the products
 21 at issue in this case “are often what we considered a loss leader,” meaning “they can be sold at an
 22 amount that doesn’t generate a net profit.” Tr. at 1119:21-1120:12. In other words, Google’s
 23 claim of financial harm based on loss of investment is contradicted by the trial record.

24 Google’s claim that it suffered prejudice fails for another reason too—Google’s lack of
 25 evidence of causation. Google has no evidence that it would have done anything differently had
 26 Sonos told Google it would later obtain patents on overlapping zone scenes. That evidence of
 27 causation is necessary. *See Gasser Chair*, 60 F.3d at 776 (overturning district court’s finding of
 28 equitable estoppel where infringer failed to prove that “he would have acted differently” where

1 evidence showed that infringer “ignored [patentee’s] charges of infringement because he believed
 2 the patent was invalid”); *id.* (noting that Federal Circuit had previously rejected equitable
 3 estoppel claim where “defendants have not shown that they would have altered their conduct if
 4 [the patentee] had sued earlier”). Google fails to identify any evidence in the trial record
 5 indicating that it would have modified its behavior if given additional notice—because it cannot.⁹

6 Contrast this lack of evidence with *ABB Robotics*, for example, where, the Federal Circuit
 7 affirmed the district court’s finding of prejudice where, among other things, the district court
 8 “considered that GMF took a license under the CM control patents, thereby modifying its
 9 behavior to avoid infringement, and found that action supported an inference that GMF would
 10 have done the same with respect to its device accused of infringing the ’536 patent.” 52 F.3d at
 11 1065. Here, Google did not take a license to *any* of Sonos’s patents, which led Sonos to not only
 12 initiate this lawsuit but also seek exclusion of Google’s infringing products from the United
 13 States—successfully. And Google responded to both the ITC investigation, and this suit, not by
 14 ceasing infringement or coming to the table but instead by filing retaliatory infringement suits
 15 against Sonos at the ITC and in federal district courts—sending an unmistakable message to other
 16 smaller companies about the risks of suing Google. These are the acts of a willful infringer and a
 17 monopolist bent on crushing smaller competitors, not a party that would have simply taken a
 18 license if Sonos had provided *even more* detail than it already had about the fact that Google’s
 19 speakers and related products infringed Sonos’s zone scenes patents.

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⁹ To the extent that Google complains in reply that this course of dealing evidence was not shown to the jury, it was largely not shown to the jury at Google’s behest. And in any event, proving entitlement to equitable estoppel is Google’s burden, so Google’s lack of evidence that it would have modified its behavior means that Google’s claim must be denied regardless of whether or not the Court takes judicial notice of, e.g., Google’s retaliatory conduct outside of this lawsuit.

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In fact, the evidence demonstrates that Google *would not* have acted differently had it been aware of the asserted patents any earlier. As explained, Sonos repeatedly told Google about Google’s infringement of earlier zone scene patents (the ’853, ’228, and ’206 patents), which are broader in scope than the asserted patents. Not only did Google not stop infringing, it increased its infringement over time. How could it be that if Google would have known about narrower patents sooner, it would have stopped infringing, when Google knew about broader patents earlier and continued to infringe?

IV. CONCLUSION

Sonos respectfully requests that the Court deny Google’s request for judgment in its favor with respect to its affirmative defenses of prosecution laches and equitable estoppel.

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